



POLICY

Policy Name:	Bloodborne Pathogen Exposure Control Plan 2021				
Policy #:	8304.020	Policy Dept.:	Infection Prevention	Population:	<input checked="" type="checkbox"/> Adult <input checked="" type="checkbox"/> Peds
Approval Authority:	Infection Prevention Committee	Effective:	05/31/1992	Reviewed:	01/2021
Responsible Executive:	IP Medical Director	Revised:	01/01/2021		
Responsible Office:	Infection Prevention	Contact:	IP Clinical Director		

1. **Policy Statement** – All healthcare providers who are at risk for occupational exposure to blood, body fluids, and other potentially infectious material (OPIM) will follow the guidelines outlined in this policy.
2. **Who Should Read This Policy?** All Erlanger staff, Licensed Independent Practitioners (i.e. medical staff, mid-level provider), contracted personnel, students/trainees and volunteers.
3. **Purpose-** The Bloodborne Pathogen Exposure Control Plan (ECP) for Erlanger Health System (EHS) is provided to eliminate or minimize the risk for occupational exposure to bloodborne pathogens in accordance with the OSHA Bloodborne Pathogen Stand, 29 CFR 1910.1030.
4. **Definitions-**
 - a. Occupational Exposure to Blood & Body Fluids- An occupational exposure is defined as a percutaneous injury (e.g., needlestick or cut with a sharp object) or contact of a mucous membrane (e.g., eyes, mouth, or nose) or non-intact skin (e.g., chapped, abraded, dermatitis) with blood or body fluids that are potentially infectious. This includes human bites that result in broken skin.
 - b. Potentially Infectious Body Fluids- In addition to blood and body fluids containing visible blood, the following fluids are also considered potentially infectious: semen, vaginal secretions, cerebrospinal fluid, synovial fluid, pleural fluid, peritoneal fluid, pericardial fluid, and amniotic fluid. Feces, urine, nasal secretions, saliva, sputum, sweat, tears and vomitus are not considered potentially infectious unless they contain visible blood (example: saliva during dental procedures).

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A. Definition of Occupational Exposure to Bloodborne Pathogen

For the purpose of this plan, "occupational bloodborne pathogen exposure" is defined as a percutaneous injury or contact between non-intact/irritated/injured skin surfaces, eyes, mouth, nose, or other mucous membranes and blood, body fluid or OPIM that occurs as a result of the performance of duties.

B. Exposure Risk Categories - Job Classifications

Each job title is assigned an exposure risk category for the purpose of this plan to address potential risk for an occupational exposure to blood, body fluids, and OPIM. This determination is based on risks incurred while performing one's job or procedures, without regard to the use of personal protective equipment. See *Appendix A: Category 1 - Job Classifications*. The following exposure risk categories are applied at EHS:

1. Category 1 Health Care Workers (HCWs)
 - HCWs who, during the course of their work, routinely engage in tasks or procedures that involve exposure to blood, body fluids or OPIM.
 - HCWs whose normal work duties do not routinely involve exposure to blood, body fluids or OPIM, but where a reasonable potential for exposure exists.
2. Category 2 Health Care Workers – (Not listed)
 - Individuals whose job responsibilities and tasks do not involve actual or potential exposure to blood, body fluids, or OPIM are not subject to the Bloodborne Pathogen Exposure Control Plan.

C. Methods of Exposure Prevention and Control

EHS shall follow the established hierarchy of controls in addition to administrative controls. Additions and/or modifications to these controls may be implemented based on technological improvements and/or ongoing problem solving processes.

1. Engineering Controls

Engineering controls will be used to eliminate or isolate hazards that expose HCWs to blood and body fluids. The following engineering controls are utilized at EHS.

- a. Sharps Disposal Containers: All disposable needles, needle-syringe units, metal catheters, scalpel blades, lancets, or any other non-reusable sharp objects are to be discarded in a designated sharps container. These containers are puncture-resistant, sealable, leak-proof plastic boxes with a "biohazard" label on the exterior surface. They are located as close as feasible to the point of use in each patient room, patient treatment area, laboratory, ambulance and in selected support service areas. HCWs should be able to view the inlet opening of the disposal container, and containers should be located within arm's reach of the point of use when possible.

The sharps containers shall be mounted in an upright position with a locked bracket. [EXCEPTIONS: Portable sharps containers may be used in ambulances, vehicles of various clinical outreach workers, clinical areas where the presence of used sharps could pose a risk (e.g., psychiatry, pediatrics), other clinical situations where portables decrease the risk for exposure to

sharps (i.e. shorter than average staff, limited or no wall access) and during special events such as group screening, health fairs, and influenza vaccination programs. Floor standing portable sharps units may be used areas with high volume sharps use or where containers cannot be safely accessed if mounted on the wall (e.g. ED, ICUs, OR).

With the exception of the Emergency Medical Services (EMS) and clinical outreach workers, it is the responsibility of the Environmental Services (EVS) Department to check all mounted and portable sharps containers regularly and to replace them when 2/3 full. EMS and clinical outreach personnel are responsible for appropriate disposal and replacement of sharps containers used in the course of their work. When removing containers of contaminated sharps from the area of use, the container should be sealed immediately prior to removal or replacement.

- b. Safety Sharps Device Technology and Needleless Systems:
 - i EHS eliminates needle-bearing devices and other non-needle sharps where safe and effective alternatives are available. Consistent and proper use of engineered safer sharps devices along with modification of potentially hazardous practices result in sharp object injury reduction. See *Appendix B: Safety Device Selection, Evaluation, and Implementation*.
 - ii It is the responsibility of the HCW's supervisor to ensure that the HCW receives appropriate training in the use of newly introduced devices, and can demonstrate competency of use. It is the responsibility of the HCW to appropriately use the devices provided.
 - iii Regardless of their capacity for improving user safety, all safety devices will be disposed of in a standard sharps container once they have been removed from the package.
 - iv All safety devices implemented will be subject to ongoing review for efficacy based on analysis of occupational exposure injury data, and other clinical input.
 - v EHS will maintain a log of safety and non-safe sharps in use including information on why the non-safe item cannot be replaced with a safety device. The non-safe devices will be evaluated annually to see if they can be replaced by safety devices. This list of safety and non-safety (sharp exclusions) devices will be maintained by IP in collaboration with Supply Chain Coordinator and the Surgical Services designee.
- c. Laboratory Engineering Controls:
 - i Pipetting will be performed only with mechanical or bulb pipetting devices designed to ensure worker safety. Mouth pipetting is strictly prohibited.
 - ii Biohazard safety hoods shall be used to perform any laboratory procedure in which aerosolized contaminants may be generated. These hoods are inspected and maintained in accordance with the manufacturer's recommendations and EHS Laboratory Department policies and procedures.

2. Work Practice Controls

In order to reduce the likelihood of a HCW's exposure to blood or other body substances, the following work practice controls shall be followed:

- a. Standard Precautions: "Standard Precautions" are to be utilized when there is reason to anticipate contact with blood, body fluids or OPIM from any human source. Standard Precautions shall be followed and appropriate barrier or personal protective equipment shall be used any time exposure to any of these substances is reasonably anticipated.
- b. Handwashing and Alcohol Hand Sanitizer Use: Hands are to be washed vigorously with water and hand soap for a minimum of 15- 20 seconds immediately, or as soon as feasible, after removing gloves or other personal protective equipment. Handwashing is to be performed as soon as possible after any contact with blood, body fluids, or OPIM. Hands that are not visibly soiled can be disinfected with the hospital provided alcohol hand sanitizer (AHS) in the place of hand washing,

except when managing patients with *Clostridioides difficile*. Hands must be washed with soap and water after caring for patients with suspected or confirmed *Clostridioides difficile*. Handwashing facilities and AHS are located in (or in close proximity to) patient rooms and treatment areas.

- c. Needle/Sharps Safety: Sharps should be disposed of in an approved sharps container immediately after use or as soon as feasible. To prevent needle stick injuries, needles should not be recapped, purposely bent, sheared, removed from syringes, or otherwise manipulated by hand. In special circumstances, a needle may need to be recapped to prevent an injury. If recapping is necessary, the HCW will use the standard one-handed technique. This technique is accomplished by placing the cap on an environmental surface and sliding the needle into the cap without touching or holding the cap. Once in place, the cap may be hand-tightened at the needle hub. In instances where it is necessary to remove the needle before disposal, a hemostat or safety device will be used to remove the needle.
- d. Invasive Procedures: All invasive procedures shall be performed in a manner that minimizes splashing or splattering of body fluids.
- e. Specimens: Specimens of blood, body fluids, or OPIM will be placed in a leak proof container during collection, handling, processing, storage, transporting or shipping.
- f. Labeling Containers and Equipment: Biohazard labels are to be provided on containers used to transport, store, or ship specimens of potentially infectious material (PIM), and on refrigerators and freezers used to store PIM.
- g. Contaminated Instruments: Disposable instruments and sharps shall be separated from non-disposable items and properly discarded at the point of use. Non-disposable instruments/equipment that has been used in the care of patients is considered contaminated. Contaminated instruments being returned to Central Sterile for decontamination and sterilization are placed in a puncture resistant container with a "biohazard" identifier. The container must be labeled during transport to Central Sterile by using a label that indicates "Biohazard" or by placing the puncture resistant container in a red bag.
- h. Contaminated Equipment: Equipment to be returned to Biomedical Engineering or to an outside facility for maintenance, servicing or repair shall be examined for visible blood and/or other body fluids and decontaminated with a hospital-approved germicide, as necessary, prior to leaving the point of origin. In the event that decontamination of specific equipment or portions of such equipment is not feasible, a readily visible "biohazard" label, or a red bag, and a note stating which portions remain contaminated shall be affixed to the equipment.
- i. Cleaning of Work Areas/Surfaces: All patient care and other work areas are to be kept clean, orderly, and sanitary. Cleaning and decontamination is to be done with a hospital-approved germicide:
 - i Upon completion of a procedure;
 - ii After overt contamination during a procedure; and
 - iii On a regular basis (i.e. end of the day).
- j. Food and Drink: No food or drink shall be stored where blood or other body substances are present (e.g., refrigerators, freezers, cabinets, shelves, work surfaces, etc.). HCWs will not eat, drink, handle contact lenses, apply cosmetics, or lip balm in any patient area, patient treatment room, or other areas where there is a reasonable likelihood of occupational exposure to blood or body fluids.

Eating by clinical staff will be confined to break areas and the cafeteria. Departments may establish a designated cabinet to set drinks (i.e. water, coffee, canned drinks) for easy access by staff. The cabinet must be clearly labeled Staff Only and must be an area where there is no

handling of blood, body fluids, potentially contaminated equipment, medical records, or devices and poses no risk for occupational exposure to blood or body fluids.

Consumption of drinks outside break areas should be done out of the view of patients and visitors where possible. Department managers/supervisors are responsible for assuring compliance with this standard.

3. Personal Protective Equipment (PPE)

"Personal Protective Equipment" (PPE) means specialized clothing or equipment used by HCWs to protect themselves from direct exposure to blood or other potentially infectious body substances, agents, equipment or materials. The degree to which PPE must resist penetration is based upon the procedure being performed.

- a. PPE Availability: PPE items will be readily available in the work area. All PPE items are provided without cost to employees. The department head is to ensure that PPE is available in appropriate sizes. If reusable, PPE is to be clean and in good repair. Department heads will ensure that HCWs receive unit/department-specific training in the proper selection as needed, use and indications for the PPE.
- b. Contamination of Personal Clothing (HCW): If a HCW's personal clothing becomes soiled with blood or body fluids, the HCW should retrieve a clean set of scrubs by calling Materials Management unless other arrangements for scrub retrieval have been made by the department supervisor. HCWs should rinse heavily soiled clothing with cold water in the soiled utility room, and bag items in an impervious bag. Arrangements can be made through the charge nurse or A1/HS to wash and dry clothing in the following areas:
 - Bledsoe Nursing Home laundry room

Erlanger facilities without access to a washer and dryer will send personal clothing out to an area laundry/dry cleaner for processing at no charge to the HCW. Refer to Erlanger Infection Prevention policy # 8304.100 "Washers and Dryers, Use of" for guidance.

c. PPE Types

- i. Gloves: Single-use powder free latex or non-latex synthetic gloves are used when it is reasonably anticipated that there will be hand contact with blood, other potentially infectious materials, non-intact skin, or mucous membranes (e.g., phlebotomy, oral, genital, or rectal exam, dressing changes, pathology procedures, patient care procedures involving body excreta, or when handling or touching contaminated items or surfaces). Certain workers may use reusable utility gloves which are made of a heavier material.
 - Gloves must be changed between different patients and when moving from a contaminated to a clean body site during the provision of care for the same patient or when the gloves become contaminated, torn or punctured.
 - Single use disposable gloves are not to be washed or decontaminated for re-use.
 - Synthetic non-latex gloves are available for individuals who are allergic to standard latex gloves.
 - Utility gloves, depending on their intended purpose, may be decontaminated for re-use, provided that the integrity of the glove is not compromised. Utility gloves will be discarded if they are cracked, peeling, torn, punctured, or exhibits other signs of deterioration, or when their ability to function as a barrier is compromised.
 - Hands must be properly washed immediately before donning gloves and immediately, or as soon as feasible, after removing gloves.

ii Eye and Face Protection PPE:

- Masks in combination with eye protection devices, such as goggles or glasses with side shields, or with a chin length face shield, are required whenever splashing, spraying, or splattering of blood, body fluids or OPIM can be generated and eye, nose or mouth contamination is considered likely.
 - Prescription glasses may be used as protective eye wear if they are equipped with solid side shields. If protective eye wear is chosen over the use of a face shield, the eyewear must be worn in combination with a mask to protect the nose and mouth.
- iii Water-Imperious Garments: A water-imperious apron, gown, or jump suit shall be worn when splattering of blood or OPIM is anticipated. The type of garment to be worn depends upon the task and the degree of exposure anticipated. It is the responsibility of each department head to determine the needs of their specific area and to assure that appropriate supplies are available.
 - iv Head Covering and Shoe Covers: Head covering and shoe covers must be worn when engaged in procedures in which gross contamination with blood or OPIM is likely to occur.
 - v Resuscitation Barrier Devices: Mouth-to-mouth resuscitation without a barrier device is not recommended. Resuscitation barrier devices are located in each patient care area.

4. Environmental Services Department (EVS)

- a. Routine Environmental Surfaces Cleaning: It is the responsibility of the EVS Department to clean and disinfect environmental surfaces such as floors, walls, cabinets, counter tops, doors, etc. A written procedure for the routine cleaning and disinfection of environmental surfaces will be maintained by EVS. Only EPA-registered tuberculocidal germicides will be used for cleaning and disinfection of environmental surfaces that have potentially been contaminated with blood, body fluids or OPIM.
- b. Spills of Blood or Body Fluids: The EVS Department is responsible for cleaning and disinfection of environmental surfaces including floors with known contamination or spills involving blood or OPIM. However, nursing staff should clean up a small liquid (e.g. blood) or solid (e.g. stool) spill on a patient care area when it can be cleaned up with a few paper towels (e.g. 1x1 foot area). For larger spills the area should be blocked off or the spill covered to prevent a fall and notify EVS for assistance.
- c. Reusable Waste Receptacles: All reusable waste receptacles that become contaminated must be cleaned and disinfected as soon as feasible in accordance with EVS policies and procedures.
- d. Broken Glass: Broken glassware, which may be contaminated, shall not be picked up directly with the hands. It must be picked up with tools designated for this purpose (e.g. tongs or forceps) or swept up and discarded in a sharps disposal container.

5. Surgical Services

- a. Universal double gloving or use of an under-glove for surgeons and scrub personnel is recommended for surgical procedures except in delicate operations, and in situations where it may compromise the safe conduct of the operation or safety of the patient, the surgeon may decide to forgo this safety measure. Double gloving has been shown to reduce exposure to the patient's blood when the outer glove is punctured or torn.
- b. Universal adoption of blunt tip suture for closure of fascia and muscle in order to reduce needle-stick injuries in surgical personnel is recommended.
- c. Use of hands free passing technique using a sharps neutral zone is recommended as an adjunctive safety measure during surgery except in situations where it may compromise the safe conduct of the operation or safety of the patient.

- d. Puncture and cut resistant gloves are to be provided for employees who handle re-usable sharps in decontamination areas such as Central Sterile.

D. Procedure Following Exposures

1) Immediate Actions

- Administer first aid to the site
- Promptly notify the area supervisor/manager
- **ALL CAMPUSES-** To ensure appropriate follow-up including: coordination of source testing, notification of labs results, and HCW evaluation, report the exposure immediately by contacting the Baroness Patient Flow Manager. EXCEPTION: **EAST CAMPUS-** notify the **East House Supervisor**
- Erlanger HCWs - notify Erlanger Express Care Employee Health as soon as possible. If exposure occurs after hours, follow up with Erlanger Express Care Employee Health the next business day
- EHS HCWs- complete the Employee\Illness\Injury form

2) Management of the Exposure

I. Event Evaluation

Evaluate exposures for the potential to transmit Hepatitis B Virus (HBV), Hepatitis C Virus (HCV), and Human immunodeficiency Virus (HIV) based on the type of body substance involved and the route and severity of the exposure. For skin exposure, follow-up is indicated only if it involves exposure to blood or a potentially infectious body fluid and the skin integrity is compromised. **Testing of needles or other sharps is not recommended.**

II. Source Evaluation

Confidentiality of the source person will be maintained at all times. The source's record should be screened for documentation of HBV, HCV, and HIV status. If the source patient is known to be infected with HIV, HBV or HC, repeat source testing is not necessary, however, the post exposure management protocol (see page 3- E) for the exposed HCW should be initiated. If source status is unknown the following tests should be performed:

- **Adult Source:** Rapid HIV screen, HCV RNA and HBsAg. NOTE: If the exposed HCW has documented immunity (anti-HB>10mIU/ml) to HBV, testing the source for HBV is not necessary. See Appendix G
- **Neonates/Infants:** In the event the source patient is an infant (newborn nursery or NICU), HIV, HBV, and HCV status of the mother will be determined and used instead of testing the infant. If the mother's status is unknown and she is unavailable for testing, the baby will be tested provided the baby's weight exceeds 1500 grams

House Supervisors/A1: Prior to ordering lab-work on newborns (NICU and newborn nursery) contact Infection Prevention at 7239 or during off-hours contact Infection Preventionist On-Call
- **Consent for testing:** Tennessee Law does not require informed consent, however, the manager or charge nurse should explain to the patient that an exposure has occurred and screening will be performed at no cost. The physician will be responsible for communicating the source patient's results and, if indicated, the recommended treatment and follow-up. If the HIV screen is positive, confirmatory testing should be performed prior to informing the source person, however, it should not delay post exposure management (see below "Post Exposure Management")
- **Unknown source or inability to test source:** If unable to test the source, the exposure incident should be assessed for the likelihood of transmission of HBV, HCV, or HIV (e.g., type of exposure).
- **Breast Milk Exposure:** As soon as the incident occurs, determine the HBV, HCV and the HIV status of the donor mother. If the status of the donor mother is unknown, she will be asked to submit a blood sample for HIV, HBsAg and HCV. Only in the event of a positive test on the source mother or inability to obtain the tests will baseline labs be drawn on the exposed infant (HIV, HBsAg and HCV). The exposed infant's family should be notified promptly that the exposure has occurred and the source patient's lab results.

III. Exposed Person Evaluation

- Negative source patient – no baseline testing or further follow-up is indicated
- Positive source patient - see below, “Post Exposure Management” for testing guidelines
- Unknown source or inability to test source - Information about where and under what circumstances the exposure occurred should be assessed for the likelihood of transmission of a bloodborne pathogen

IV. Post Exposure Prophylaxis (PEP), Management and Follow-up

1. Hepatitis C Positive Source

- ⊖ **Exposed Person Testing-** Perform baseline anti-HCV testing within 48 hours of exposure. Results from this test will determine additional testing recommendations. **Refer to Appendix F.** EHS-HCWs with positive HCV RNA results are referred to a liver disease specialist by Erlanger Express Care Employee Health.
- **Precautions to prevent secondary transmission** -The exposed person does not need to modify sexual practices or refrain from becoming pregnant. If breast-feeding, there is no need to discontinue. The exposed person should seek medical evaluation of any acute illness occurring during follow-up
- **Work restrictions** – evaluated on an individual basis by Erlanger Express Care Employee Health and/or infectious disease physician
- **Other restrictions** - refrain from donating blood, plasma, organs, tissue or semen during the follow-up period

2. Hepatitis B Positive Source

- ⊖ **Exposed Person Testing** – Post exposure testing will be determined by the immunization status of the exposed HCW. **See Appendix G for guidance.** If the HCW has documented immunity to HBV (anti-HB>10mIU/ml) no further testing is required. HCWs with positive HBV results are referred to a liver disease specialist for medical management by Erlanger Express Care Employee Health.
- **Post-Exposure Prophylaxis:** If hepatitis B vaccine and/or HBIG are required, the sooner they are administered the better. It is best to give the hepatitis B vaccine within 3 days; HBIG is best given within 24 hours, but can be given up to 7 days following exposure
- **Hepatitis B Vaccine and Testing** - Exposures to an unvaccinated HCW should lead to the initiation of the HBV vaccine. Testing for anti-HBs should be performed 1-2 months following the last dose of the vaccine series or 6 months in cases where HBIG was administered
 - **Hepatitis B Vaccine and HBIG During Pregnancy/Breastfeeding**
No apparent risk exists for adverse effects to developing fetuses when the vaccine is given to pregnant or lactating women. HBIG is not contraindicated for pregnant or lactating women
- **Precautions to Prevent Secondary Transmission** - The exposed person does not need to modify sexual practices or refrain from becoming pregnant. If breast-feeding, there is no need to discontinue. The exposed person should seek medical evaluation of any acute illness occurring during follow-up
- **Work Restrictions** – Evaluated on an individual basis by Erlanger Express Care Employee Health
- **Other Restrictions** - Refrain from donating blood, plasma, organs, tissue or semen during the follow-up period

HIV Positive Source:

I. EXPOSED PERSON TESTING: Perform baseline HIV testing at time of exposure and repeated at 6 weeks, 12 weeks, and 6 months. Earlier conclusion of testing can be done if a fourth-generation combination HIV p24 antigen-HIV antibody test is used. In this circumstance, HIV testing is performed at baseline, 6 weeks and concluded at 4 months.

II. POST EXPOSURE PROPHYLAXIS (PEP) 3-Drug PEP regimens are now recommended for ALL HIV exposures regardless of severity of exposure. See Appendix H for regimens.

***Note:** There are special circumstances in which a two-drug regimen can be used, especially when there is concern about potential adherence problems or toxicity. Consultation with an expert to explore whether alternative approaches, including a modified regimen, are appropriate.*

- PEP should be administered as soon as possible, preferably within hours of the exposure. If initiation of PEP is delayed, the likelihood increases that benefits might not outweigh the risks associated with antiretroviral medications. However, PEP still may be considered for exposures that represent an extremely high risk of transmission. Consult your local infectious disease physician or contact the **Post-Exposure Prophylaxis Hotline or PEPLINE at 888-448-4911**
 - Prior to initiation of PEP, a pregnancy test should be administered to all women of childbearing age
 - PEP for Pregnant HCW- Prior to prescribing PEP for pregnant HCWs (other special circumstances- see Appendix I), physicians should seek expert consultation with a local infectious disease physician or by contacting the PEPLINE (see above)
 - HCW's should be informed about possible drug interactions, signs/symptoms of drug toxicity (e.g., rash), and the importance of adherence to PEP regimens. PEP should be administered for 4 weeks if tolerated
 - Monitoring for PEP Toxicity: HCWs should be monitored for drug toxicity at baseline and again 2 weeks after starting PEP. At a minimum, laboratory monitoring should include a complete blood count (CBC) and renal and hepatic function tests
- III. COUNSELING/ EVALUATION** - To ensure appropriate follow up, exposed EHS HCWs will be evaluated at Erlanger Express Care Employee Health as soon as possible. Erlanger Express Care Employee Health will coordinate appointment/s for the exposed HCW with the infectious disease physician with the initial consultation appointment scheduled no later than 72 hours following exposure.
- IV. PRECAUTIONS TO PREVENT SECONDARY TRANSMISSION** - Exercise sexual abstinence or use barriers (e.g., condoms) to prevent transmission and to avoid pregnancy; refrain from donating blood, plasma, organs, tissue, or semen. If breastfeeding, counsel about the risk of HIV transmission through breast milk, and discontinuation of breast-feeding should be encouraged.
- V. WORK RESTRICTIONS** – Evaluated on an individual basis by the ID physician.

E. Biohazardous Waste Disposal

Biohazardous waste is defined as liquid or semi-liquid blood, body fluids, or OPIM that cannot be safely decanted into the municipal sewer system; saturated items that would release blood, body fluids or OPIM in a liquid or semi-liquid state if compressed; items that are caked with dried blood, body fluids or OPIM and are capable of releasing these materials during handling; contaminated sharps; and microbiological waste containing cultures of infectious agents, or pathological waste including tissue removed during a medical procedure (*Refer to EHS Infection Prevention policy #8304.005A "Management of Biohazardous Waste" on the intranet*).

1. Sharps Containers: EHS contracted service provider or EVS is responsible for replacement and disposal of sharps containers before they reach the containers fill line. Sharps containers shall be sealed immediately prior to removal to prevent spillage of contents during handling, storage, transport or shipping.
2. Biohazardous Waste Container: Patient care areas will have an impervious biohazardous waste container available. This container is lined with a red plastic bag and must have a close-fitting lid. All biohazardous waste (excluding sharps) shall be discarded in this container for subsequent removal from the area. Biohazardous waste shall not be mixed at any time with non-regulated waste. EVS personnel are responsible for the removal of the contents of these containers in accordance with EVS policies and procedures. Biohazardous waste is collected and appropriately packaged for pick-up and disposal by an authorized waste vendor or transported to the waste holding unit.

F. Laundry Procedures

All soiled laundry is considered contaminated and does not require a "biohazard" label when color coding is used to alert staff to soiled linen. Soiled linen bags are impervious and blue in color.

1. Contaminated laundry will be minimally handled and agitated, and bagged in a fluid impervious linen bag at the point of origin.
2. Laundry workers shall wear protective gloves, masks, goggles, impervious gowns, shoe covers, and other appropriate PPE to prevent exposure during handling and sorting of contaminated linen.
3. A sharps disposal container is to be readily available in the sorting area for laundry workers.

G. Pneumatic Tube System

1. Packaging of Specimens: Specimens containing blood, body fluids, or other potentially infectious items must be contained and transported in a manner that prevents breakage, leakage, or contamination of the system. Specimens are to be collected in leak proof containers, and sealed in a biohazardous bag. Then specimens are to be placed in bubble wrap or padded foam inside the system carrier. Blood culture bottles are to be sent in separate carriers. Multiple tubes are to be banded tightly together to prevent breaking. Stool specimens are not to be sent through the system unless on a guaiac card or on a culture swab. (Refer to *Appendix K: For Safety's Sake- Instructions on safely sending specimens through the tube system. Post at the Pneumatic Tube Stations*)
2. Spill of blood or body fluid in the system: Plant Operations (extension 7777) are to be notified immediately when there is a blood or body fluid contamination incident in the system. Plant Operations will shut down and clean the affected portions of the system. Spill clean-up is to be carried out by sending a special clean out bottle containing a 1:10 bleach solution (1part bleach to 9 parts water) throughout the system. Plant Operations will follow the decontamination procedure outlined by the manufacturer while using appropriate PPE. Notify EVS for decontamination of carpeting and outside the carrier station. Disinfect the carrier 1:10 bleach or other hospital approved disinfectant. Plant Operations will report the spill to Infection Prevention for follow-up as needed.

H. Training and Documentation

All training will be conducted during working hours at no charge to the HCW. Completion of the computer based interactive training modules provides detailed information on the bloodborne pathogen exposure control plan. During computer based learning activities, access to a qualified trainer will be provided to answer questions that require an explanation before the training can proceed. Answers to questions can be obtained in the following manner:

- Monday thru Friday 8am to 5pm - Call Infection Prevention at extension 7239.
- After 5pm on Friday, weekends, and holidays - Call House Supervisor to contact the Infection Preventionist on call.

1. Orientation Training

- a. General Orientation: During New Employee Orientation and prior to commencing work, all employees receive training on the ECP. Infection Prevention (IP) will be available to answer questions during training. The training will include Standard Precautions, engineering and work practice controls, personal protective equipment, and blood and body fluid exposures, Hepatitis B Virus (HBV), Hepatitis C Virus (HCV), Human Immunodeficiency Virus (HIV), other bloodborne pathogens (BBPs), Hepatitis-B vaccine, and procedures to follow in the event of a blood or body fluid exposure. New employees will complete the IP computer based learning modules within 30 days of employment.
 - Orientation of new physician house staff on the provisions of this plan is conducted by Infection Prevention.
 - Orientation of other non-EHS (i.e. contract personnel, students) Category 1 HCWs is the responsibility of their respective employer or educational institution and shall occur prior to their commencing work at EHS.
 - b. Department/Unit-Specific Orientation: Additional orientation and training regarding a department specific plan is provided as needed and documented by the department manager within the first 30 days of the individual beginning his/her work or training in the department.
2. Annual Re-Training
Each HCW shall participate in re-training on an annual basis. Retraining is accomplished by having employees complete all Infection Prevention computer based modules at least annually. Access to a qualified trainer is provided as described under *H. Training and Documentation*.
 3. Training Documentation and Record Maintenance
The department manager is responsible for assuring compliance with all training and completion of testing for his/her employees. Training records shall be maintained in the employee file with manager/director for at least three (3) years from the date of training.

I. Management of Blood and Body Fluid Exposures

1. Hepatitis B Vaccine
 - a. Eligibility: Hepatitis B vaccine shall be offered free of charge and within ten working days of employment to all employees and physician house staff and upon reassignment to any Exposure Category 1 job (see appendix A).

NOTE: Vaccination of other non-EHS Category 1 HCWs involved in work or training on EHS premises is the responsibility of their respective employer or educational institution.
 - b. Exceptions: Hepatitis B vaccine does not have to be offered to employees or other HCWs who have previously received the full series with development of antibodies, or who are known to have natural immunity to Hepatitis-B virus.
 - c. Refusal of Vaccine: Following applicable training, eligible HCWs electing to decline the vaccine must sign a refusal form which is maintained in the individual's medical record. Eligible HCWs who initially refuse the vaccine may request it at a later date and receive it through EHS at no charge upon signing an informed consent form.
 - d. Pre-Vaccination Antibody Testing: In accordance with current CDC Guidelines, pre-vaccination antibody testing is not required prior to administration of the vaccine, but may be provided if there is a history of possible Hepatitis-B exposure or deemed appropriate by the medical provider.
 - e. Post-Vaccination Antibody Testing: Post-vaccination antibody testing is recommended to be done 1-2 months following completion of the Hepatitis-B vaccine series.

- f. Non-Responders to Initial Series: Persons who do not respond to the primary vaccine series should receive a second 3 dose series or be evaluated to determine if they are HbsAg positive. They should be tested 1-2 months after completing the second series. If still no response to the vaccine, these workers should be counseled by a Work Force provider.
 - g. Vaccine Booster Doses: Booster doses of Hepatitis-B vaccine are currently recommended only in certain post-exposure situations, as determined by the medical evaluation.
2. Bloodborne Pathogen Exposure Reporting, Evaluation and Follow-Up
- a. First Aid Measures: The exposed HCW shall immediately wash any exposed skin areas with copious soap and water. Exposures to the eyes, mouth, or inside of the nose shall be flushed with copious tap water or saline solution. Serious injuries requiring immediate intervention should be promptly evaluated in the EHS Emergency Department or the nearest emergency facility.
 - b. Documentation:
 - i Employee Illness/ Injury Report is completed by the HCW for all exposures and is to include:
 - Name, identification numbers, job title, work area, supervisor, and telephone number (s) of exposed HCW; and
 - Name and medical record number of the source patient, if known.
 - ii Sharp Object/Needle stick Injury Exposure Form or the Blood and Body Fluid Exposure Form will be completed by House Supervisor/A1 for each exposure. (*See Appendix D Sharp Object/Needle stick Injury Exposure Form and Appendix E Blood and Body Fluid Exposure Form*).
 - iii The department manager or designee will follow-up with the employee following an exposure within six days of the exposure to assure proper procedures and appropriate safer devices were used. The manager will document and report actions to be taken to prevent similar exposures and report these to the Human Resources department using the *Needle stick Follow-up Form, Appendix C*.
3. Exposure Injury Log
- The following data concerning exposure incidents are to be recorded by Employee Health in a sharps injury database including but not limited to the following:
- a. Date and time of exposure
 - b. Type and brand of device involved in the exposure incident
 - c. Description of the incident which includes:
 - i Job classification of exposed HCW
 - ii Department or work area where the incident occurred
 - iii The procedure being performed at the time of the exposure incident
 - iv How the incident occurred
 - v The body part involved in the exposure incident
 - vi If the sharp had engineered sharps injury protection and whether the protective mechanism was activated, and if the injury occurred before, during, or after the protective mechanism was activated
 - vii If the sharp had no engineered sharps injury protection, the HCWs opinion as to whether and how such a mechanism could have prevented the injury, as well as the rationale for the opinion, and
 - viii The HCWs opinion about whether any other engineering, administrative, or work practice control could have prevented the injury, as well as the basis for the opinion.
4. Reporting Exposures: Exposed **HCWs from all campuses will notify** the department supervisor or designee, complete an Illness, Injury, Exposure Report (Form 5282) and notify the **House Supervisor/A1 to arrange for labs on the source patient** and collection of additional information about the incident. All HCWs will follow-up with Employee Health following an exposure to assure all thorough follow-up as directed by the House Supervisor/A1.

The House Supervisor/A1-will use a “down time” request to order necessary tests on the source patient. The patient will not be billed for tests associated with occupational exposure follow up. The source patient’s physician will be informed about the exposure and testing will be completed as soon as possible by the nurse caring for the patient.

J. Post-Exposure Medical Evaluation and Follow-up Care:

A confidential post-exposure medical evaluation is required immediately (or as soon as feasible) following an occupational bloodborne pathogen exposure incident.

1. Source Patient Baseline Testing: Patient consent for HIV, HCV, and HBV testing is preferred and sought but is not required. If the source patient refuses to have blood drawn for testing, blood that may already be available in the laboratory is to be used for testing.
2. Exposed HCW Baseline Testing: HCW testing is done when deemed appropriate per policy or medical evaluator. Results of this baseline testing may be compared to future test results to assist in determining if an infection resulted from the exposure incident. The HCW may refuse to be tested for HIV or may elect to have blood drawn but not tested. In this situation, the blood will be stored in the laboratory for 90 days for testing at a later date if subsequent consent is provided by the HCW.
3. Exposed HCW Prophylaxis: Appropriate post-exposure prophylaxis will be offered to the exposed HCW, at no charge. Any recommended ongoing prophylaxis and laboratory monitoring shall be provided by Work Force or the appropriate specialty area upon referral from the physician.
4. Exposed HCW Counseling: The HCW will be counseled by Employee Health and given information regarding HIV and Hepatitis-B and Hepatitis-C infection with recommendations for preventing transmission of these viruses. The HCW shall also be advised concerning observation and reporting of specific viral-like illness symptoms, should they occur following the exposure incident.
5. Post-Exposure Follow-up Notification: Within 15 working days of an occupational exposure, Work Force shall provide the HCW with written notification, which summarizes the following:
 - results of HBV, HCV and/or HIV testing on the HCW and the source patient (as applicable)
 - medical care rendered to the worker
 - assessment of immunization status and any recommendations for additional immunizations or other prophylactic measures; and
 - any medical conditions resulting from the exposure which, in the opinion of the physician, require further evaluation and treatment.
6. Reporting of HIV, Hepatitis Seroconversion or transmission of other BBPs: Any exposure incident resulting in HIV and/or hepatitis seroconversion, or transmission of any other pathogen shall be reported to IP Director by Employee Health for review and recommendation by IP Medical Director and Employee Health Medical Director.

K. Medical Records of the Exposed Health Care Worker

1. Confidentiality: All HCW medical records are maintained and accessed in accordance with EHS standards for medical confidentiality. Access to this information by the HCW’s supervisor, department head or other non-authorized personnel is prohibited without the written consent of the HCW. HCW records will be made available to the HCW in accordance with 29 CFR 1910.20. Any HCW may access his/her individual medical record by following the applicable EHS policies and procedures. HCW records will be made available to the Tennessee Occupational Safety and Health Administration (TOSHA) upon written request in accordance with EHS policies and procedures.
2. The exposed HCW’s social security number should be located in the medical record maintained by Work Force.
3. Term of Record Maintenance: All HCW medical records must be maintained for 30 years beyond termination of the individual’s employment with EHS.

L. OSHA 300 Log and Summary of Occupational Injuries and Illnesses

1. Recording: Employee Health will be responsible for appropriate documentation of all occupational bloodborne pathogen exposure incidents on the OSHA 300 Log.
2. Reporting: Employee Health will provide a summary of all bloodborne pathogen exposure incidents at least annually (excluding all personal identifiers) to the Environment of Care Committee, Department Managers, and the Infection Prevention Committee (IPC) for analysis and recommendation for action as needed.

M. Maintenance of Bloodborne Pathogen Exposure Control Plan

1. The system-wide plan will be contained on the EHS Intranet.
2. This plan will be reviewed annually and revised by Infection Prevention. Revisions require the approval of the Infection Prevention Committee (IPC) and the Medical Executive Committee.

Department/Unit-Specific Plans: It is the responsibility of each department manager to collaborate with Infection Prevention to develop and maintain a department/unit-specific exposure control plan, if necessary to supplement this general policy. The department specific plan is to be updated annually, and as needed to address any significant changes in tasks, procedures, equipment, etc., which may result in a potential occupational exposure and require explanation above and beyond that offered in the EHS plan. It is the responsibility of each department head to ensure that the department/unit-specific plan is submitted to Infection Prevention for review and reviewed with staff annually.

Local Approval Committee(s) (as applicable)

Approved by _____ Date _____

Approved by _____ Date _____

Approved by _____ Date _____

Medical Director Approval (as applicable)

Approved by _____ Date _____

Policy Committee Approval (as applicable)

Approved by _____ Date _____

Responsible Executive Approval From Final Approval Committee

Approved by _____ Date _____

References:

1. OSHA Occupational Exposure to Bloodborne Pathogens; Needlesticks and Other Sharps Injuries; Final Rule, 29 CFR Part 1910.1030, Federal Register Vol. 66, NO 12, January 2001.
2. State of Tennessee Hazardous Waste Management Regulations, 2001.
3. Centers for Disease Control, *Updated U.S. Public Health Service Guidelines for Management of Occupational Exposures to Hepatitis B Virus, Hepatitis C Virus, and HIV and Recommendations for Post exposure Prophylaxis*, MMWR, June 29, 2001, Vol. 50, No. RR11.

4. American College of Surgeons, *Statement on Sharps Safety*, Bulletin of the American College of Surgeons Vol.92, NO.10, October 2007.
5. Centers for Disease Control, Recommendation and Reports. Testing for HCV Infection: An Update of Guidance for Clinicians and Laboratorians. MMWR 2013; 62(18): 362-5.
6. Centers for Disease Control, Recommendations and Reports Updated US Public Health Service Guidelines for the Management of Occupational Exposures to Human Immunodeficiency Virus and Recommendations for Post exposure Prophylaxis. Infection Control and Hospital Epidemiology, Vol. 34, No. 9 (September 2013), pp. 875-892.
7. Centers for Disease Control, Recommendations, and Reports Guidance for Evaluating Health-Care Personnel for Hepatitis B Virus Protection and for Administering Post exposure Management. MMWR, Volume 62, No 10, December 20, 2013.
8. Centers for Disease Control, Recommendations, and Reports Updated U.S. Public Health Service. Guidelines for the Management of Occupational Exposures to HBV, HCV and HIV and Recommendations for Post-Exposure Prophylaxis. MMWR, Volume 50, No RR-11, June 29, 2001.
9. OSHA Compliance Directive: Enforcement Procedures for the Occupational Exposure to Bloodborne Pathogens, CPL 2-2, 44D, November 5, 1999.
10. OSHA Occupational Exposure to Bloodborne Pathogens, Final Rule. 29 CFR, Part 1910. December 6, 1991.

Appendix A

Category I - Job Classifications

These employees are at risk for exposure to bloodborne pathogens according to their job description. Procedures these employees perform are those that have potential for contact with blood and OPIM.

AP/DA Health Centers

Dental Assistant
Dental Hygienist
Dentist
LPN
Medical Assistant
Medical Technologist
Patient Care Technician
RN

Admitting/Registration

Registration Clerk

Central Dispatch

Material Technician
Supervisor IV

Central Transport

Patient Care Transporter

Dietary

Registered Dietician
Diet Support
Hospitality Services Assistant
Hospitality Services Manager

Engineering

CEP/CIP Plant Operations
CEP/Plant Manager
General Services Assistant
Corrective Maintenance Technician
Preventive Maintenance Technician
Project Technician
Corrective Maintenance
Preventive Maintenance
Projects Supervisor
Energy Management Technician

Environmental Services

Operations Manager
Environmental Service Assistant
Supervisor
Floor Technicians
Truck Driver

Lifeforce Air Medical

AP Technician
Aviation Operations Dir.
Communication Specialist I
Communication Specialist II
Communication Specialist III
Director of Maintenance
Director Pre-hospital Services
Chief Pilot
Flight Nurse
Flight Paramedic
Office Manager
REMSA Administrative Assistant
REMSA Chief Operations Officer
REMSA Captains
REMSA EMT
REMSA EMT-P
REMSA Convalescent Transporters

Linen Distribution

Linen Distribution Tech

Medical Services

Physicians
Nurse Practitioners
Physician Assistants
Nurse Mid-wife

Pastoral Care

Director
Clinical Pastoral Education Supervisor
Clinical Pastoral Education Students
Volunteers

Pathology

Client Service Rep.
Client Service Liaison
Lab Liaison
Lab Outreach Manager
LIS Manager
Medical Technologist
MLT
Operations Manager
Secretary II
Specimen Processor
Team Leader
Secretary III
MT Quality Care Specialist
Specimen Processing Coordinator

Patient Care Services

Child Life Specialist
EKG Technician
Emergency Room Technician
Enterostomal Therapist
GI Lab Technician
Registered Nurse
LPN
Medical Assistant
Nurse Educator
Nurse Interns
Nursing Monitor Tech
Patient Care Tech II
Orthopedic Cast Technician
Unit Clerk
Wound Care Technologist

Patient Assistant

Administrative Representatives
Critical Care Representatives
Guest Representatives

Pharmacy

Staff Pharmacist
Certified Pharmacy Technician
Patient Care Tech III
Clinical Pharmacist
Technician Coordinator
Secretary II

Radiation Oncology

Administrator
Director-Radiation Oncology
Secretary II
Senior Dosimetrist
Physicist
Radiation Therapists
Registered Nurse
Unit Clerk

Radiology

CT Technologist/CT Team Leader
Nuclear Medicine Technologist/ Nuclear
Medicine Supervisor
Patient Care Tech IV
Radiology Tech Special Procedure
Special Procedure Team Leader
Radiology Technologist
Radiology Team Leader
Ultrasonographer/Ultrasound Supervisor
MRI Technologist MRI Team Leader

Rehab Services

Audiologist
Audiology Coordinator
Clinical Coordinator
Medical Director
Physical Therapists
Occupational Therapist
Records Rep
Rehab Services Secretary
PT/OT Assistants

Renal Transplant

Clinical Transplant Coordinator
Clinical Education Specialist

Resource Management

Case Managers

Respiratory Care

Certified Resp. Therapist
Clinical Education Specialist
Director
EEG Tech, Registered
Evoked Potential Audiologist
Graduate Therapist Polysomnography
Technologist
Pulmonary Technologist
Registered Resp. Therapist
Supervisor Physiology Lab
Supervisor Reg. Resp. Therapist
Technical Assistant
Technician

Security

Director
Lieutenant
Hospital Police

Sterilization and Decontamination

Clinical Manager
QA/Training Coordinator
Central Sterile Specialist
CS Specialist, Certified
Shift Supervisor/Lead Tech
Sterile Instrument Room Technologist

Surgery

Registered Nurse
Surgical Technologist
Central Services Technician
CRNA
Anesthesiologist
Specialty Manager
Clinical Coordinator
Perfusionist
Orthopedic Technical Assistant
Radiology Technologists

Radiology Manager
Support Service Supervisor
Assistant Supervisor - Support Services
Perioperative Support Assistant
General Service Assistant
Registered Nurse First Assistant

Technology Management

Biomedical Specialist
Diagnostic Imaging Service Specialist (I and II)
General Technician
Senior Technician
Technical Services Manager

Trauma Services

Clinical Nurse Specialist
Program Director

Volunteer Services

Director of Volunteers
Jr. Volunteer Coordinator
Volunteers

Appendix B

Process for Safety Device Selection, Evaluation, and Implementation

A) **Device Selection**

- 1) Sharp object injury data and other data on exposures to blood and body fluid are collected by Work Force. The data identifies hazards and trends throughout the EHS, and are summarized and reported annually to ICP. The data is reviewed and recommendations for safer devices and are forwarded to the appropriate Clinical Resource Management (CRM) team for approval, evaluation, and implementation. Recommendations for work practice changes are forwarded to the service line leader and department managers for review and action.
- 2) CRM leaders review the recommendations and guides EHS through product evaluation and implementation. Input is sought from frontline HCWs through evaluation of recommended products from a variety of clinical settings prior to final selection and implementation of devices.
- 3) The CRM team will assess the following design features before recommending safer devices for evaluation:
 - Safety feature provides a barrier between the hands and the sharp after use;
 - Safety feature is an integral part of the device and not an accessory;
 - Safety feature is in effect before disassembly and remains in effect after disposal
 - The feature is simple to use and requires minimal training to use.
- 4) The Supply Chain CRM manager or coordinator coordinates vendor training of HCWs, the product evaluation process, and collection of HCW evaluation documents to ensure that:
 - the safety feature is effective and reliable;
 - the device is acceptable to the healthcare worker;
 - the device does not adversely affect patient care; and
 - the device is compatible with other products currently being used.
- 5) Designated HCWs conduct follow up during the evaluation period to identify problems and provide support to evaluators.
- 6) After a device is accepted for implementation, CRM leadership works with departments to ensure HCW training occurs.
- 7) A list of all new safety devices or needleless devices evaluated and/or implemented in EHS is to be forwarded to IP to update the device list.

B) **Clinical Practice Changes**

Clinical practice changes are based on evaluation of circumstances surrounding injury/exposure incidents and identification of trends and opportunities for change which are forwarded to the appropriate department managers by Infection Prevention for action as needed.

C) **Training requirements and compliance**

- 1) It is the responsibility of each department head/manager to ensure that all HCWs are trained to use all safety devices before the devices are introduced into the clinical setting. New employees will be trained during orientation in the clinical area.
- 2) It is the responsibility of the HCW to use safety devices appropriately.
- 3) The department head/manager will conduct ongoing assessment of HCW compliance, and problems associated with the use of safer devices. Problems and concerns are to be reported to the appropriate CRM team or Infection Prevention for review and action(s) as indicated.



**Erlanger Health System
Needlestick/Sharps Injury Follow-up Form**

Instructions:

1. TOSHA requires that this document be completed within 6 days of injury for all employees who experience a needle stick or sharp object injury.
2. A supervisor/manager or designee in the department where injury occurred must complete the form.
3. Fax the completed form to Erlanger Express Care Employee Health **Fax # 541-9043**

Date Report Completed: _____

Name and Title of person completing report: _____

Date of Injury: _____ **Date Called to A1:** _____

Employee Name: _____ **Home Department:** _____

Department where injury occurred: _____

How did the injury occur? Include the procedure being performed, device being used and other detailed information.

- Surgical Services:** Check best answer for each question below:
- Could a safety scalpel have been used in this case: Yes or No
 - Could blunt suture have been used in this case: Yes or No
 - Could no hands passing have been used in this case: Yes or No

Appendix D

Sharp Object / Needlestick Injury Exposure Form

Injury I.D. # _____

Erlanger Employee Non-Employee (If non-employee must complete employer information below.) Company name: _____

Supervisor name: _____ Phone: _____

Results called to: _____ Date/Time: _____

Faxed to Infection Prevention (6364) Date/Time: _____

1. Last Name: _____ 2. First Name: _____

3. Medical Record Number: _____ 4. Employee ID # _____

5. Mailing Address: _____

6. Dept. Phone/Pager #: _____ 7. Job Title (Badge) _____

8. Surgical Service: _____ 9. OR# _____

10. Name of Source: _____ 11. MR# of Source: _____

12. Date of Injury: _____ 13. Time of Injury: _____

14. Department where injury occurred? _____

15. Home Dept. (other services/depts. Involved to include employee home dept.): _____

16. Was the sharp item contaminated? Yes No Unknown

17. Were you the original user? Yes No

18. What procedure task was being performed when the injury occurred? _____

19. What type of device caused the injury (name of device)? _____

20. Brand/Manufacturer name on device _____

21. Was the device a safety design? Yes No

22. If a safety design, was the protective mechanism activated? Yes, Fully Yes, partially No

23. Did the exposure happen? Before activation During activation After activation

24. Was the injured worker right handed left handed wearing gloves

25. Was the injury:

Superficial (little or no bleeding) moderate (skin punctured, some bleeding)

Severe (deep stick cut/perfuse bleeding)

26. Employee has had Hepatitis B Vaccine Series: Yes No (Fri or Sat night send to ED to offer)

Supervisor's Name: _____

Completed by: _____ Date: _____

Do you believe the injury could have been prevented by?

A change in work practice some other safety product (specify in narrative) other (specify in narrative)

Employee advised to contact Work Force next business day.

Appendix E

Blood and Body Fluid Exposure Form

Injury I.D. # _____

Erlanger Employee Non-Employee *(If non-employee must complete employer information below.)*

Company Name: _____

Supervisor name: _____ Phone: _____

Results called to: _____ Date/Time: _____

Faxed to Infection Prevention (6364) Date/Time: _____

1. Last Name: _____ 2. First Name: _____

3. Medical Record Number: _____ 4. Employee ID # _____

5. Home Mailing Address: _____

6. Dept. Phone/Pager #: _____ 7. Job Title (Badge) _____

8. Surgical Service: _____ 9. OR# _____

10. Name of Source: _____ 11. MR# of Source: _____

12. Date of Injury: _____ 13. Time of Injury: _____

14. Department where injury occurred? _____

15. Home Dept. _____

16. Which body fluids were involved in the exposure? _____

17. Describe the incident: _____

18. Was the body fluid other than blood visibly contaminated with blood? Yes No Unknown

19. Was the exposed part: (check all that apply)? intact skin non-intact skin eyes nose mouth

other (describe) _____

20. Which protective items were worn at the time of the exposure? gloves goggles eyeglasses eyeglasses with side shield

face shield surgical mask surgical gown plastic gown plastic apron other _____

21. Brand/Manufacturer: _____

22. If equipment failure, please specify equipment type: _____

23. Employee has had Hepatitis B Vaccine Series: Yes No (Fri and Sat night send to ED to offer).

Supervisor Name: _____

Completed by: _____ Date: _____

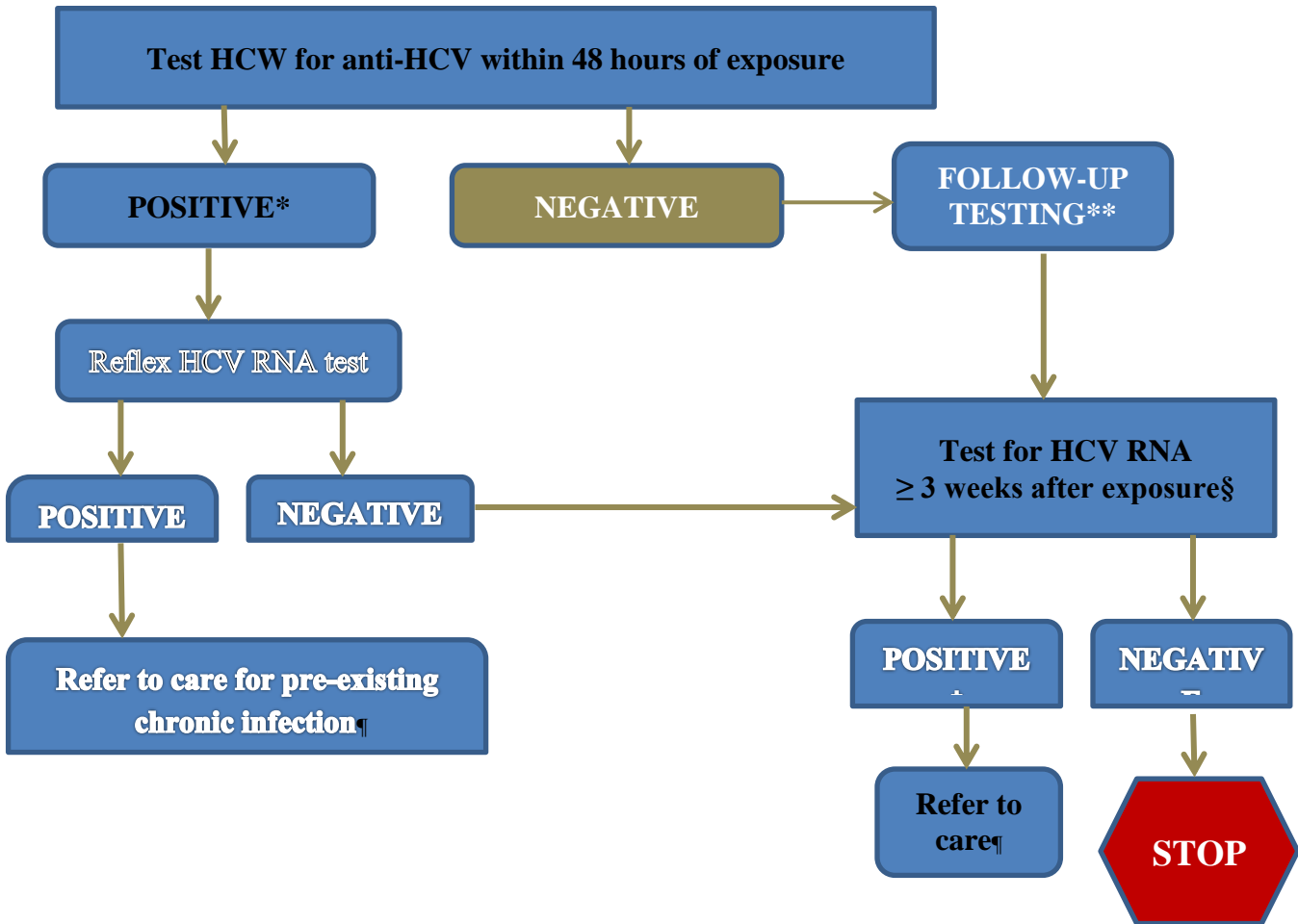
Do you believe the injury could have been prevented by: a change in work practice

some other safety product (specify in narrative) other (specify in narrative)

TESTING ALGORITHM FOR HEALTHCARE WORKERS POTENTIALLY EXPOSED TO HEPATITIS C VIRUS

Recommended Testing and Follow-up

Test the source for HCV RNA*. If HCV RNA positive, or if HCV infection status unknown, follow the algorithm below.



*If it is not possible to test source for HCV RNA, then test for antibodies to HCV (anti-HCV) and screen HCW exposed to anti-HCV positive source. Note that persons with acute infection may test HCV RNA positive but anti-HCV negative.

*In a national representative population sample with low (1%) HCV infection prevalence, 22% of anti-HCV positive results were determined to be false-positive. An additional 10% had indeterminate results in a confirmatory assay; most were likely to be false-positive.

**Anti-HCV testing at ≥6 months with reflex to HCV RNA test, if positive, could also be done.

§A single negative HCV RNA test using currently available FDA-approved tests is considered sufficient to rule out chronic HCV infection when screening an HCV antibody-positive individual with no known ongoing risk of exposure. HCV RNA becomes detectable within 3 weeks after exposure when the antibody is still undetectable. Persons who develop symptoms of acute HCV infection may be tested earlier than 3 weeks, but if negative would require re-testing at ≥3 weeks.

¶Spontaneous clearance of infection may occur up to six months after exposure; persons testing HCV RNA positive < 6 months after exposure should be tested again at ≥6 months after exposure to determine infection status.

±All patients with current HCV infection as evidenced by a positive HCV RNA test result should be evaluated by a practitioner with expertise in assessment of liver disease and HCV treatment. Guidance for hepatitis C treatment can be found at www.Hcvguidelines.org and is changing rapidly with the advent of new therapies.

HEPATITIS B EXPOSURE MANANGEMENT

Healthcare Worker (exposed person) Vaccination Status	Source HBsAg POSTIVE or UNKNOWN
<u>Documented Responder</u> (anti-HBs ≥ 10 mIU/MI) after complete series (≥ 3 doses)	NO ACTION NEEDED
<u>Documented Nonresponder</u> (anti-HBs < 10 mIU/mL) after 2 complete series (≥ 6 doses)	<ul style="list-style-type: none"> ➤ HBIG* x2 (separated by 1 month) ➤ Exposed Testing : <ul style="list-style-type: none"> • <u>Baseline</u>- total anti-HB • <u>6 month**</u> -HBsAg & total anti-HB
<u>Vaccine response unknown</u> (after 3 doses)	<ul style="list-style-type: none"> ➤ Test exposed for anti-HBs <ul style="list-style-type: none"> • If anti-HBs ≥ 10 mIU/mL -No treatment necessary • If anti-HBs < 10 mIU/mL - HBIG* x1 initiate revaccination • <u>6 month**</u> -HBsAg & total anti-HB
<u>Unvaccinated/incompletely vaccinated</u>	<ul style="list-style-type: none"> ➤ HBIG* x 1 and initiate/complete vaccination ➤ Exposed Testing: <ul style="list-style-type: none"> • <u>Baseline</u>- total anti-HB • <u>6 month**</u> -HBsAg & total anti-HB

Abbreviations: HCW =healthcare worker, HBsAg = hepatitis B surface antigen; anti-HBs = antibody to hepatitis B surface antigen; HBIG = hepatitis B immune globulin.

***HBIG** should be administered intramuscularly as soon as possible after exposure when indicated. The effectiveness of HBIG when administered >7 days after percutaneous, mucosal, or non-intact skin exposures is unknown. HBIG dosage is 0.06 mL/kg.

** Testing- anti-HBs testing should be performed 6 months after administration of HBIG to avoid detection of passively administered anti-HBs.

Appendix H

HIV Post-Exposure Prophylaxis Regimens

PREFERRED HIV 3-DRUG PEP REGIMEN:

Raltegravir (Isentress®; RAL) 400mg PO Twice Daily

Plus

Truvada™ 1 PO Once Daily

[Tenofovir DF (Viread®; TDF) 300mg + emtricitabine (Emtriva™; FTC) 200mg]

ALTERNATIVE REGIMENS

(May combine 1 drug or drug pair from the left column with 1 pair of nucleoside/nucleotide reverse transcriptase inhibitors from the right column; prescribers unfamiliar with these agents/regimens should consult physicians familiar with the agents and their toxicities)

Raltegravir (Isentress®; RAL)	Tenofovir DF (Viread®; TDF) + emtricitabine(Emtriva™; FTC); available as Truvada™
Darunavir (Prezista®; DRV) + ritonavir (Norvir®; RTV)	Tenofovir DF (Viread®; TDF) + lamivudine (Epivir®; 3TC)
Etravirine (Intelence®; ETR)_	Zidovudine (Retrovir™; ZDV; AZT) + lamivudine (Epivir®; 3TC); available as Combivir®
Rilpivirine (Edurant™; RPV)	Zidovudine (Retrovir™; ZDV; AZT) + emtricitabine (Emtriva™; FTC)
Atazanavir (Reyataz®; ATV) + ritonavir (Norvir®; RTV)	
Lopinavir/ritonavir (Kaletra®; LPV/RTV)	

*The alternative regimens are listed in order of preference; however, alternatives may be reasonable based upon patient and clinician preference

ALTERNATIVE COMPLETE FIXED-DOSE COMBINATION REGIMEN, NO ADDITIONAL ANTIRETROVIRALS ARE NEEDED: Stribild (elvitegravir, cobicistat, tenofovir DF, emtricitabine)
ANTIRETROVIRAL AGENTS FOR USE AS PEP ONLY WITH EXPERT CONSULTATION: Abacavir (Ziagen®; ABC), Efavirenz (Sustiva®; EFV), Enfuvirtide (Fuzeon®; T20), Fosamprenavir (Lexiva®; FOSAPV), Maraviroc (Selzentry®; MVC), Saquinavir (Invirase®; SQV), Stavudine (Zerit®; d4T)
ANTIRETROVIRAL AGENTS GENERALLY NOT RECOMMENDED FOR USE AS PEP: Didanosine (Videx EC®; ddI), Nelfinavir (Viracept®; NFV), Tipranavir (Aptivus®; TPV)
ANTIRETROVIRAL CONTRAINDICATED AS PEP: Nevirapine (Viramune)

Situations for Which Expert Consultation for Human Immunodeficiency Virus (HIV) Post-Exposure Prophylaxis (PEP) Is Recommended

Delayed (ie, later than 72 hours) exposure report

- Interval after which benefits from PEP are undefined

Unknown source (eg, needle in sharps disposal container or laundry)

- Use of PEP to be decided on a case-by-case basis
- Consider severity of exposure and epidemiologic likelihood of HIV exposure
- Do not test needles or other sharp instruments for HIV

Known or suspected pregnancy in the exposed person

- Provision of PEP should not be delayed while awaiting expert consultation

Breast-feeding in the exposed person

- Provision of PEP should not be delayed while awaiting expert consultation

Known or suspected resistance of the source virus to antiretroviral agents

- If source person's virus is known or suspected to be resistant to 1 or more of the drugs considered for PEP, selection of drugs to which the source person's virus is unlikely to be resistant is recommended
- Do not delay initiation of PEP while awaiting any results of resistance testing of the source person's virus

Toxicity of the initial PEP regimen

- Symptoms (eg, gastrointestinal symptoms and others) are often manageable without changing PEP regimen by prescribing antimotility or antiemetic agents
- Counseling and support for management of side effects is very important, as symptoms are often exacerbated by anxiety

Serious medical illness in the exposed person

- Significant underlying illness (eg, renal disease) or an exposed provider already taking multiple medications may increase the risk of drug toxicity and drug-drug interactions

Expert consultation can be made with local experts or by calling the National Clinicians' Post-Exposure Prophylaxis Hotline (PEpline) at 888-448-4911.

Appendix J



Erlanger Health System

Exposure Requisition

Exposure Source

Log in as: REI-

Patient Name: _____

Medical Record Number: _____

Date of Birth: _____ Male Female

Date: _____ Time of Collection: _____

Dr: _____

HIV I/II SCREEN (H3)

HEPATIS B SURFACE AG (HBSAG)

HEPATITIS C VIRUS RNA (QHCV)

NO CHARGE (NOCHG)

Collect two 7ml red tops. QHCV requires 1ml serum frozen within two hours of collection.